Nuthatch as belonging to the Scansores) which ought to have been avoided, and we cannot say that we are altogether satisfied with the plates.

XXIV.—Letters, Extracts, Notices, &c.

WE have received the following letters, addressed to the Editors, since our last issue:—

Sirs,—I have been engaged for some years in collecting information about the methods of catching wild birds employed in different parts of the world. This autumn I visited the North of Italy, to study the Italian *Uccellande*.

Professor Giglioli, Mr. Tait, and the Dean of Cairo have, among others, given me valuable aid. Mr. Littledale, of Baroda, has already forwarded a most interesting collection of snares. It occurs to me as possible that some of our Foreign Members, or brother Ibises residing abroad, may be kind enough to help on these enquiries. At all events I venture to make known my anxiety to explore the subject as thoroughly as circumstances may render possible.

The old Italian works of Antonio Valli and Olina are full of interesting particulars; but I hope to trace out the evolution of fowling on a wide basis of facts.

Yours &c.,

Carlisle, Dec. 13th, 1894.

H. A. Macpherson.

SIRS,—As I visited the Zurich Museums a few weeks after Dr. Sclater, I should like to supplement his information with a few remarks. It is perfectly true that there is no Swiss collection of Aves in the University Museum; but it must not be inferred that there is no Swiss collection of birds at Zurich.

There is a capital museum of Swiss birds and mammals at the Zürichhorn, and the proprietor (Mr. Nägeli) is most obliging in furnishing information to visitors. I was delighted to find what a variety of birds visit the Canton of Zurich on their annual migrations; among the rarer visitants being examples of Fuligula rufina, Fuligula nyroca, and Hydrochelidon leucoptera. The series of Cyanecula wolfi struck me as particularly good. It included one adult male with a perfectly blue, unspotted gorget. Mr. Nägeli was good enough to supply me with a nestling of Accentor collaris for the Carlisle Museum.

Yours &c.,

Carlisle, Jan. 22nd, 1895.

H. A. Macpherson.

Sirs,—I see in your October number of 'The Ibis' a note, p. 557, as to a statement by Mr. Hartert as to the way birds of prey carry their legs.

I can thoroughly endorse his statement that Milvus govinda carries its legs stretched out behind it with the claws closed.

The Kites here do just the same. I have particularly noticed them since reading your note, and they invariably carry their legs in that position.

Yours &c.,

W. Wilfrid Cordeaux, Queen's Bays.

[P.S.—In future my address will be :-

21st Hussars,

Cairo, 23rd January, 1895.

Secunderabad, India.]

SIRS,—From the last volume of 'The Ibis' I see that two British collectors, Messrs. A. C. and A. Chapman, have been visiting our shores in the summer of 1893. Without any regard to the laws, in the close-time, they have been shooting birds and collecting eggs, not only of our common species, but especially of the rarest, such as the Avocet, the Black-tailed Godwit, &c., which are still lingering only in a few places. Rumours of similar visits by Englishmen in former years have reached me. May not public opinion be aroused in England against such proceedings towards their neighbour-country? In the name of European ornithology we appeal to you to help us in preserving some of the few

places in Europe still left to the birds. You might inform the Members of the B.O.U., and others, that we do not wish to have visitors of that kind, and that we are now doing our best to make the overseers and the police at the places in question do their duty. Any naturalist, desirous of seeing our rare birds in their haunts, will be welcomed; but collecting can be allowed only to a very limited extent and under control. Mr. Chapman's article contains nothing unfamiliar to Danish ornithologists, except the "Pelicans," from the description, however, evidently Larus argentatus (a species not otherwise mentioned, though it is common on the coast), seen through dim air. I know our west coast very well, and I have frequently observed how birds may look wonderfully large when standing on the flat shore close to the water, the humid air producing what we term "hildring," a deceiving view.

Universitets Zoologiske Museum, Kjöbenhavn. 2nd February, 1895. Yours &c., HERLUF WINGE.

SIRS,—In reply to Herr Herluf Winge's accusations, here are the facts:—In 1889, previous to a first visit to Denmark, one of us endeavoured to obtain the "limited licence" mentioned to secure a few specimens "under control"; but after long correspondence (which has been preserved), this was refused, on the ground that the applicant was a foreigner. On our second visit, in 1893, we did not therefore further trouble the authorities at Copenhagen, but took a gun, with twelve cartridges, to obtain certain desired specimens. No infraction of Danish law, however, was committed by us; for the local authorities in Jutland at once furnished us with licences (for which we paid), available for 14 days; the only stipulation being that we should not shoot the "Pomeranz Fögel." But since none of our Danish friends were able more precisely to identify that mysterious fowl, we remain in the dark as to whether we inadvertently committed the crowning crime of its destruction.

Herr Winge states that we "specially collected" some of the rarest of Danish birds; but he only specifies two—the Godwit and the Avocet. Of these we shot one male and one female of each—total, four—and the whole of our "collecting" was on the same moderate scale. We have submitted to the Editors of 'The Ibis' the whole catalogue of crime, but the list is really too paltry and insignificant to be worth printing. Suffice it to say that fewer than two dozen specimens in all were brought home, and of these several were obtained from local gunners, who seem to shoot right merrily throughout the close-season. On some days the pop-popping of guns was going on in every direction, afloat and ashore, and these people were shooting for shooting's sake—a very different thing from the discriminate selection of a few specimens.

Again, our critic reproaches us with taking eggs. But is he not aware that every egg found on these marshes is swept up at regular intervals all through the season, for food? The eggs of Duck or Wader, Gulls and Terns, Avocet, Reeve, Pintail, and the rest, all go in thousands to feed the hungry Jutlander,—so what could our few specimens matter? If Herr Winge is not aware of these facts—of the indiscriminate shooting and egging—then he does not know the Jutland coast, as he claims to do and as we really do; if he is aware, then his attack on us is unwarranted and hardly ingenuous.

The eggs of Godwit, we may add, are safe enough, as these birds breed sporadically on deep and dangerous bog, where no one but such hardened criminals as ourselves care to venture. Herr Winge is also wrong in classing the Avocet as "rare"; it breeds in scores—if not hundreds—together in West Jutland.

Herr Winge doubts our Pelicans, and suggests that they were Gulls seen under "hildring" conditions. But such a mistake is not at all likely to be made by men accustomed all their lives to the observation of Wildfowl under all or any atmospheric conditions. Moreover, there was no "hildring" on that bright May morning when the eight Pelicans sat preening themselves off the salt-spit in that Cimbrian

"marisma"; and if Herr Winge will refer to the description, he will see that there was no lack of other birds alongside the Pelicans (including *Larus argentatus*) for comparison of their relative sizes.

Yours &c.,

Moor House, Leamside, ABEL and ALFRED C. CHAPMAN. February 23rd, 1895.

SIRS,—I am desirous of expressing my thanks to the authorities of the Smithsonian Institution, Washington, D.C., and in particular to Mr. F. A. Lucas and Dr. R. W. Shufeldt, for their prompt response to my appeal in 'The Ibis' for last April, in which I asked for nestlings and embryos for the purpose of a careful study of the structure and distribution of the so-called "nestling-down" (neossoptiles). Through the intermediation of these gentlemen the whole of the U.S. Government collection has been placed at my disposal.

This is the only response that my letter has evoked, though I had hoped that my appeal would have aroused some interest in a question about which, as yet, we know little. Possibly, when the paucity of facts relating to this subject becomes more fully realized, help will be forthcoming. If collectors abroad could be induced to send home consignments of embryos, newly-hatched nestlings, and adults—preserved in chromic acid in the case of the embryos—they would render us good service, inasmuch as we might then hope to know a little more thoroughly the species at present to hand.

Repeating the request I made in 1894,

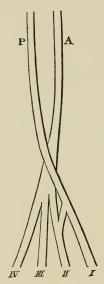
Yours &c.,

Department of Comparative Anatomy, University Museum, Oxford, 10th February, 1895. W. P. PYCRAFT.

Sirs,—By a slip of the pen, in the last number of 'The Ibis,' p. 166, I wrote "Sir John" for "Sir James C. Ross."
Yours &c.,

The College, Durham, Jan. 7, 1895. H. B. TRISTRAM.

The Deep Plantars in the Trochilidæ.—On page 617 of Newton's 'Dictionary of Birds' is a figure, Vc, purporting to show the arrangement of the deep plantars in the Trochilidæ, while on the opposite page occurs the following emphatic statement: "any other description and figures of these Trochiline tendons are either incorrect or misleading." Now I regret exceedingly to be compelled to differ from Dr. Gadow, but at the same time I have no hesitancy in saying that the figure and description given in the 'Dic-



Deep plantars of Lampornis dominicus and Florisuga mellivora.

- A. Flexor perforans digitorum.
- P. Flexor longus hallucis.

tionary of Birds' are probably as incorrect and misleading as any that ever have been, or ever will be, published. Both Dr. Shufeldt and myself have had the misfortune to describe the deep plantars of the Trochilidæ as being, like those of Passeres, schizopelmous, an error to which I will refer later on. On going carefully over the subject again I find that the flexor longus hallucis is connected by a short branch with that division of the flexor perforans digitorum

which runs to the second digit, the arrangement being as shown in the accompanying figure, which is the result of some dozen drawings made both with and without the camera lucida. My friend, Dr. Stejneger, who also examined the specimen, arrived independently at the same result. There is a considerable amount of connective tissue, a strong vinculum in fact, about the tendons where they cross, and in removing this Dr. Shufeldt and myself must have severed the narrow branch connecting the f. l. h. and the f. p. d. II. It is, of course, barely possible that this branch may sometimes be absent, but I do not give myself the benefit of the doubt. One thing, however, I can assert most positively; I have never dissected a Humming-bird's foot in which the flexor perforans digitorum did not give off three branches, to digits II. III. IV. A very simple experiment will convince anyone that the flex. per. dig. sends a branch to the fourth digit; if the flexors of I. II. III. be severed, and the flexor longus hallucis earefully removed, a pull on the flex. per. dig. will flex the fourth digit, which it could not possibly do were the tendons arranged as figured in the 'Dictionary of Birds.' -Frederic A. Lucas.

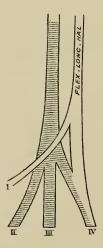
Washington, D.C., U.S.A.

I AM sorry for having stood godfather to a diagram which has turned out to be the most incorrect and most misleading of all. The gentleman to whom I felt indebted for it has lost no time in informing me that it is quite wrong; he has sent me another, vouched to be correct, in which the fl. prf. supplies each of the front toes with a strong tendon, while the fl. h. "goes to the 1st digit and sends slips to the 2nd, 3rd, and 4th; in the case of the latter two, the slips do not amount to more than a few fibres." Mr. Lucas fully agrees with this statement. The little slips to digits 3 and 4 are not represented in Mr. Lucas's diagram. They are, however, rather important as last remnants of a regular four-split condition of the tendon of the fl. h. Consequently those most concerned in this discussion, namely, the Humming-birds themselves, come off best, because they prove to be

still nearer related to the Cypseli than I have been able to show.—H. Gadow.

Cambridge, March 1st, 1895.

Deep Flexor Tendons of Macropteryx.—Mr. Lucas also sends us a note upon the deep flexor tendons of the Swift (Macropteryx coronata), which appear to differ from the tendons of other Cypseli. In Cypselus alpinus (cf. Garrod, P. Z. S. 1875, p. 344) the two tendons of the deep flexor muscles completely blend together before any tendons to the toes are given off. But in Macropteryx the flexor hallucis gives off a slip to the hallux, and is then continued on to blend, not with the undivided tendon of the flexor communis, but with that branch of it which goes to supply the fourth digit. This curious arrangement is shown in the accom-



panying cut. It does not agree with any of the seven modifications of the arrangement of these tendons described and figured by Garrod. But it is almost exactly like the arrangement of the tendons in *Scopus umbretta*, figured by Beddard (P. Z. S. 1891, p. 18, fig. 4b).

The Fertilization of Flowers by Birds.—We are well accustomed to hear of the fertilization of flowers by insects;

that birds, in some cases, perform the same function is, we believe, a new discovery. In 'Nature' for January last (vol. li. p. 235) Mr. Maurice S. Evans, writing from Durban, Natal, gives some interesting details as to the mode of fertilization of two species of parasitic plants of the genus Loranthus-L. kraussi and L. dregei-which grow on trees in that district. It appears that the fecundation of Loranthus kraussi is entirely due to the labours of two species of Sunbirds, Cinnuris olivaceus and C. verreauxi (cf. Sharpe's cd. of Layard's Birds of S. Afr. pp. 309, 310), which frequent these flowers in great numbers. "A little quiet watching," says Mr. Evans, "will show the birds at these flowers, splitting open flower after flower, and getting head and bill covered with pollen in moving about, undoubtedly fertilizing the capitate receptive stigmas of other and older flowers." In order to ascertain whether the flowers of the Loranthus would be fertilized without the aid of the Sun-birds, Mr. Evans covered a small branch of them containing from 80 to 100 blossoms with a net, and found that not one of the blossoms so covered set seed. After careful watching he came to the conclusion that this Loranthus is quite sterile, without the external aid supplied by the birds. After the fruit is ripe another bird, a Barbet, Barbatula pusilla, further assists the propagation of the Loranthus by eating the covering of the berry and rejecting the seeds and the viscid matter around them. To clear away these the Barbet wipes its bill upon a branch, to which the seeds of the Loranthus adhere by the viscid matter and germinate.

Somewhat similar facts are related by Mr. Evans respecting the mode of fecundation of a second species of *Loranthus*, *L. dregei*, which grows on the coastlands of Natal, usually parasitic upon an introduced syringa, *Melia azadarach*. He believes that this plant also is "absolutely dependent" on the Sun-birds *Cinnyris olivacea* and *C. verreauxi* for its sexual propagation.

Obituary.—Mr. Alfred Forbes Sealy, one of the founders of the B.O.U., died recently in India. Possessed of a private

fortune, he resided at Cambridge for several years after he took his degree at that University, and his rooms became the rallying-point of the local naturalists, for he was an ardent ornithological and entomological collector. He was induced to take a strong interest in native education in India. and, accepting the office of Principal of a college established by the Rajah of Cochin, one of the independent sovereigns, he left England about 1861. He at first attempted to continue his pursuits in India, but soon found his duties too onerous to render that possible, and, though retaining to the last his interest in Natural History, his connection with it practically ceased from the time of his departure, and in 1867 he withdrew from the B.O.U. His rather large collection of stuffed birds was dispersed by sale at Stevens's rooms in 1867—on which occasion a purchaser "borrowed" the manuscript catalogue, which, to the detriment of other buyers, has not since been seen. His collections of birds' eggs and British insects he gave to the Museum of the University of Cambridge. Mr. Sealy came home some three or four years ago with the intention of remaining in this country; but so earnest an appeal was made to him to return to the scene of his former labours that he consented to go out to India again in 1893, and therefore had not been much more than a twelvemonth in that country when an apoplectic seizure terminated his life. Mr. Sealy was the first to ascertain and announce the fact that Porzana bailloni was a native of England, it having been previously supposed to be but a casual visitor. This he did in 'The Zoologist' for 1859 (p. 6329), but beside some other notes in the same journal we believe his only contribution to ornithological literature was his 'Classified List of the Names and Latin Synonyms of the British Birds' (Cambridge, 1853).

EDWARD HARGITT, R.I., M.B.O.U., was born on May 3rd, 1835, at Edinburgh, where his father, the late Charles Hargitt, a well-known professor and composer of music, then resided. As the latter possessed a notable gallery of pictures

and was a great lover of art, Edward Hargitt had ample inducement to become a painter, and accordingly we find him a student in the schools of the Royal Scottish Academy under Robert Scott Lauder, having for companions Mr. W. Orchardson, R.A., Mr. J. MacWhirter, R.A., the late John Pettie, and other well-known artists. Up to 1880 his works were frequently to be seen at Burlington House, but his forte lay in water-colours rather than in oils, and to the former he devoted the greater part of his attention, especially after his election to the Institute in 1887. Addicted to Scottish scenery, his work led him into many of the wildest and most picturesque districts of the Highlands, where, during many years, he devoted much of his time to ornithology. At that time few men of kindred tastes knew the remoter districts so well, and even now it may be said that few know them better than our deceased friend did. In company with Auguste, the younger brother of Rosa Bonheur, he visited some of the least frequented districts of the French and Spanish Pyrenees; he explored portions of Normandy with the veteran Nourry, of Elbeuf; and everywhere he acquired information, which was always freely placed at the disposal of his ornithological acquaintances. One strong feature was the interest he showed in the study of birds in down and fledgling plumage, a subject which had then received scant attention in England; and it was owing to his relationship with Sysselmand Müller, of the Færoes, that the early stage of the Fulmar Petrel was first made known in the 4th edition of Yarrell's 'British Birds,' in 1884. studies and collections embraced all the birds-with their eggs-of the Western Palæarctic region; and when these collections swelled to a size incompatible with the accommodation he could afford, the bulk of the birds passed into the British Museum, while the eggs were acquired by Mr. Seebohm, to form part of the entire collection subsequently presented by the latter to the nation. The immediate cause of want of space for these was Mr. Hargitt's selection of the Woodpeckers for special study, and in 1890 he produced vol. xviii. (Picidæ) of the 'Catalogue of the Birds in the British Museum,' a work inferior to none for conscientious treatment. Besides this, he worked continuously at a series of paintings to form a monographical gallery of the Picidæ, illustrating every type in British and foreign museums, and giving coloured portraits of every variation in plumage. It was only on February 20th that we saw him last at the Meeting of the B. O. Club, full of justifiable pleasure at having completed his twelve years of hard work, and prepared for private circulation the sixteen or seventeen stout volumes to which this elaborately illustrated monograph will extend. never strong; for years he had been an uncomplaining martyr to asthma; illness set in, and he died on March 19th. A very quiet, unobtrusive man, generous almost to a fault, chivalrous in the highest sense of the word, few men have passed away so deeply and so deservedly mourned by those who knew him best.

We have just heard, with great regret, of the death of ALEXANDER GOODMAN MORE, M.B.O.U., formerly of the Dublin Natural History Museum; also of the decease of our Foreign Member George N. Lawrence, of New York, a veteran ornithologist, full of age and honour. To do justice to the merits of these Members we must defer their obituary notices to our next number.

News has also reached us of the sudden death of Mr. R. Champley, of Scarborough, Yorks., a collector who was well known in ornithological circles. He was the possessor of no fewer than nine eggs of the Great Auk (*Alca impennis*), and at various times he contributed valuable information respecting the existing skins, eggs, and bones of this now extinct bird. His name is constantly noted in Mr. Symington Grieve's monograph.

One of the last of the old race of North-Country naturalists has passed away by the decease of Mr. Charles Murray Adamson, of Jesmond, near Newcastle-on-Tyne. He was a friend and contemporary of John Hancock, and the author of 'Studies of Birds,' 'Scraps about Birds,' &c., delightfully written.